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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/680,601

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Mehryar Khalili Garakani

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EXAMINER

ABELSON, RONALD B

ART UNIT

PAPER NUMBER

2619

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/680,601	Applicant(s) GARAKANI ET AL.	
	Examiner Ronald Abelson	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4,5,7,9,11,12,14,16,18,21,22 and 24-27 is/are allowed.
- 6) ☒ Claim(s) 1,2,6,8,10,13,15,17,19,20 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/6/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.



Attachment(s)

- | | |
|--|---|
| 1) ☒ Notice of References Cited (PTO-892) | 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) ☐ Notice of Informal Patent Application |
| 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) ☐ Other: _____ |

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Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 2, 13, 20, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US 6,771,648) in view of Cloonan (US 20020126699).

Regarding claims 1, 13, 20, Kim teaches packetizing calls for transmission over a communication link having a particular bandwidth threshold (fig. 4, col. 6 lines 59-62). Note, ATM data is transmitted in cells/packets.

Kim teaches monitoring an amount of bandwidth being used to transmit the packetized calls on said communication link (CAC, periodic measurements, current link utilization, buffer occupancy, col. 2 lines 14-19).

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Kim teaches feeding back to said a call admission control mechanism a signal to limit the new calls admitted when the bandwidth being used approaches said particular bandwidth threshold (dynamic CAC, new connection admitted if, col. 5 lines 51-64). The examiner corresponds the applicant's threshold with B_{link} in the reference.

Although Kim teaches multiple priority level (CBR, VBR, ABR, UBR, col. 6 lines 57-59), the reference is silent on identifying packetized calls that are lower priority than remaining packetized calls when the bandwidth being used approaches said particular bandwidth threshold; when one or more lower priority calls are identified, suppressing the lower priority calls by reducing an amount of transmitted packets corresponding to the lower priority calls to provide bandwidth for the new calls.

Cloonan teaches identifying packetized calls that are lower priority than remaining packetized calls when the bandwidth being used approaches said particular bandwidth threshold (amount of requested bandwidth greater than the amount of available bandwidth, packets to be lost can be selected based on priority of service flow type, [0055]); when one or more lower priority calls are identified, suppressing the lower priority

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calls by reducing an amount of transmitted packets corresponding to the lower priority calls to provide bandwidth for the new calls (packets to be lost can be selected based on priority of service flow type, [0055]).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of Kim by implementing the algorithm of Cloonan to suppress lower priority calls in order to admit a higher priority call, as shown by Cloonan. This modification can be performed in software. This modification would benefit the system by ensuring that higher priority traffic is transmitted.

Cloonan teaches selecting one or more of the packetized calls for suppression regardless of whether the packetized calls are all equal priority so that non-selected calls are completely unsuppressed such that only the selected calls are affected by over-subscription (packets to be lost can be selected at random, [0055]).

Although Cloonan does not explicitly teach selecting when there are no identified lower priority calls, it would have been obvious to one of ordinary skill in the art, to modify the system of by selecting at random when there are no identified lower priority calls, as suggested by Cloonan. This modification

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can be performed in software. This modification would benefit the system by allowing all the calls to be completed during over-subscription.

Regarding claim 2, wherein the monitoring is performed after the packetized calls are established and while the packetized calls are in progress, such that actual, non-predicted bandwidth usage is observed for the packetized calls (Kim: CAC, periodic measurements, current link utilization, buffer occupancy, col. 2 lines 14-19).

Regarding claim 23, wherein the monitoring is performed after the packetized calls are established and while the packetized calls are in progress, such that actual, non-predicted bandwidth usage is observed for the packetized calls (Kim: CAC, periodic measurements, current link utilization, buffer occupancy, col. 2 lines 14-19).

3. Claims 6 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim and Cloonan as applied to claims 1 and 13 above, and further in view of Lee (US 20030129988).

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Although the combination teaches a CAC, the combination is silent on the communication link connects a Base Transceiver Station to a Base Station Controller.

Lee teaches a CAC for monitoring a communication link that connects a Base Transceiver Station to a Base Station Controller (fig. 2).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of combination by incorporating the CAC within the system of Lee. This modification can be performed according to the teachings of Lee. This modification would benefit the system by providing the actual bandwidth usage of the system to the CAC, thus providing for more efficient use of bandwidth.

4. Claims 8, 10, 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim, Cloonan, and Lee as applied to claim 6 above, and further in view of Livet (US 7,010,329).

Regarding claims 8, 17, and 19, although the combination teaches CAC, the combination is silent on GSM.

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Livet teaches CAC (fig. 3, col. 4 lines 45-55) in a GSM environment (col. 2 lines 19-24).

Therefore it would have been obvious to one of ordinary skill in the art, to modify the system of the combination by implementing the system in a GSM environment, as suggested by Livet. Adhering to GSM standards can perform this modification. This modification would benefit the system since GSM is a standardized protocol that is used throughout the world.

Regarding claims 10 and 19, the packetized calls are packetized using loss-less codecs and each of said loss-less codecs is associated with one DSO channel and handles four telephone calls. Note, as admitted by the applicant, in a GSM system, each DSO carries four GSM sub-channels. One LLC handles the data for one DSO (pg. 4 lines 27-30).

Allowable Subject Matter

5. Claims 4, 5, 7, 9, 11, 12, 14, 16, 18, 21, 22, and 24-27 are allowed.

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Response to Arguments

6. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Abelson whose telephone number is (571) 272-3165. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Ronald Abelson
Examiner
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